

### REMARKS

Claims 1-8 and 12-23 are pending in the present application and stand rejected.

Claim 1 has been amended to delete the phrase "wherein said material is at least a portion of an absorbent article" from step (a). Step (b) has been amended by deleting "applying a high energy surface treatment to said material to form a treated material" and inserting "increasing the surface energy of said material." Support for this amendment may be found at page 32, lines 5-16. Step (c) has been amended for clarity purposes to include "having an increased surface energy." Claim 1 has also been amended to recite "wherein a bodily exudate absorbing article comprises said material." Support for this amendment may be found on page 31, lines 16-29.

Claim 3 has been amended to correct an antecedent basis error.

Claim 6 has been amended to insert a "step of increasing the surface energy of said material is performed by" in place of "high energy surface treatment applied in step (b) comprises" in order to recite a more preferred embodiment. Claim 6 has further been amended to recite additional members of the Markush group. Support for both amendments is found at page 32, lines 8-12.

Claim 7 has been amended to place the recited elements in the more appropriate Markush group form.

Claims 14-23 are cancelled without prejudice.

New Claims 24-26, each dependent from Claim 1, have been added to recite a preferred embodiment where the material exhibits a liquid strike-through time as measured by a Strike Through Test. Support for these new claims may be found in claims 9-11 as originally filed and at page 33, lines 17-22.

New Claim 27, dependent from Claim 1, has been added to claim the product produced by the process of Claim 1.

No new matter is believed to have been added. Consequently, entry of these amendments is respectfully requested.

### REJECTIONS UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

The Office rejected Claims 1-8 and 12-13 for failing to comply with the written description requirement. Specifically, the Office states, "The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention." The Office is unclear as to the "support for the process of treating the 'hydrophobic . . . components' while they are part of that or even all of the

'absorbent article.'" Applicants have amended Claim 1 to delete the phrase "wherein said material is at least a portion of an absorbent article" from step (a). The phrase "wherein a bodily exudate absorbing article comprises said material" has been added to Claim 1 to recite a preferred embodiment of the invention. The revision clarifies Applicants' assertion that the claim remains directed to a method of rendering a material hydrophilic and not toward a method of forming an absorbent article. The revision more clearly expresses that the inclusion of the material in a bodily exudates absorbing article is not directed to any particular step and should not be read as such. In light of the amendment and discussion presented, Applicants respectfully request withdrawal of the § 112, first paragraph rejection.

#### REJECTIONS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

The Office states that Claims 1-8 and 12-23 are rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants traverse the rejections. Each rejection is discussed in order as presented within the Office Action.

The Office states that the term "high" in modifying "high energy," as found in Claims 1 and 14, is vague and indefinite unless clearly defined. Furthermore, the Office states that the term "high" is relative with no defined bounds. Applicants again point to case law with regard to this rejection. Case law states that acceptability of relative claim language is based on whether one of ordinary skill in the art would understand what is claimed when the claim is read in light of the specification. *Seattle Box Co. v. Industrial Crating & Packing, Inc.*, 731 F.2d 818, 826 (Fed. Cir. 1984). The Office has not addressed whether one of ordinary skill in the art would understand the meaning of the term "high energy surface treatment." However, in an effort to improve the clarity of the claim, Applicants have amended Claim 1 to omit the language in question. As a result, Applicants assert that the indefiniteness rejection is moot and should be withdrawn.

The Office asserts that the term "gush," as found in Claim 14-23, is an undefined quantity. Claims 14-23 have been cancelled rendering the rejection moot. New claims 24-26 specifically claim 5mL gushes. As a result, the rejection should be withdrawn.

The Office rejects the term "absorbent" in Claim 1 as being relative. Applicants have amended Claim 1 to specifically recite a "bodily exudates absorbing article."

The Office states that clarification is needed in regard to the previous amendment of Claim 1. The Office states, "[W]hat the article may absorb is not defined, this would appear to exclude water and other aqueous or related materials." Applicants have amended Claim 1 to recite that "said material comprises at least a portion of a bodily exudates absorbing

article.” As a result of this amendment, water and other aqueous materials are not excluded from being absorbed. Furthermore, the Office states that “step (a) requires that the material (substrate) being treated already be a part (to all) of an abstract [sic] article.” Applicants have amended Claim 1 to delete the language in question from step (a). Claim 1 has been amended to include “wherein a bodily exudate absorbing article comprises said material.” However, this limitation is not associated with any specific step. As a result, Applicants assert that Claim 1 clearly reflects the intent of Applicants.

The Office states that, with regard to Claims 14-23, the “liquid strike through” test has no clear effect. In Claims 14-16, now cancelled, Applicants claimed “the liquid strike-through time of said treated material with said nanoparticles applied thereto is less than or equal to about 10 seconds after 3 gushes of the test liquid according to the Strike Through Test.” Applicants, in new Claim 24-26, recite essentially the same limitation with the only alteration being to specify 5mL gushes. In Applicants’ prior response dated January 15, 2004, Applicants’ stated that “‘liquid strike-through’ refers to the transport of moisture/liquids through a substrate.” In light of the claim language, the substrate is clearly the material treated with the nanoparticles.

In further regard to the liquid strike-through test formerly presented in Claims 14-23, the Office poses the rhetorical question, “To pass completely through, to be totally absorbed so none passes through, or what?” The liquid strike-through test is definite as written for at least three reasons. First, the specification recites that the “liquid strike-through” refers to the transport of moisture/liquids through a substrate. See page 3, line 30. Second, the liquid strike-through test is adequately described in specification. See page 48, line 23. Third, even if the Office has difficulty understanding the meaning of liquid strike-through test, the standard for definiteness is based upon whether one of ordinary skill in the art would understand the meaning of liquid strike-through test. Applicants direct the Office to case law regarding compliance with 35 U.S.C. §112, second paragraph stating

Determining whether a claim is definite requires an analysis of whether one skilled in the art would understand the bounds of the claim when read in light of the specification. If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, §112 demands no more.

*Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1378 (Fed. Cir. 2000) (quoting *Personalized Media Communs., L.L.C. v. ITC*, 161 F.3d 696, 705 (Fed. Cir. 1998)). Applicants assert that one skilled in the art would clearly understand the terms “liquid strike-through” and “liquid strike-through time.” In support of this assertion, Applicants submit

herewith a declaration in accordance to 37 C.F.R. §1.132. As a result of the declaration and discussion presented, Applicants assert that the liquid strike-through test, liquid strike-through, and liquid strike-through time are clear as presented and would be understood by one skilled in the art.

The Office further states that "Claim 14 does not positively state whether or not the 'hydrophobic' material that has been 'high-energy' treated and coated with nanoparticles is now hydrophilic. The Office states that "[c]larification of the intended meaning is the claims remained needed." While Claim 14 has been cancelled, the strike-through test is now recited in Claims 24-26. As discussed above; the liquid strike-through test, liquid strike-through, and liquid strike-through time would all be understood by one of ordinary skill in the art. As a result, the requirements of 35 U.S.C. §112 have been met.

In response to the Office's continued §112 rejections, Applicants' direct the Office to case law that may further clarify what a "person skilled in the art" is deemed to know.

We do recognize that part of the skills of such persons includes not only basic knowledge of the particular art to which the invention pertains but also the knowledge of where to search out information. Well known text books in English are obvious research materials. Similarly, public records concerning U.S. patents are likely to be checked, and information therein is reasonably accessible in view of the published abstracts and our classification system. . . . We do not exclude the possibility that foreign patents and foreign language printed publications may also be relevant to the inquiry of what is likely to be known . . . .

*In re Howarth*, 654 F.2d 103, 106-107 (C.C.P.A. 1981). In light of the court's reasoning, a person skilled in the art is deemed to possess basic knowledge of the art and the ability to find information. For example, a person skilled in the art of absorbent articles would clearly recognize the meaning and effect of the liquid strike-through test. A person skilled in the art would either (i) know the test as disclosed by the European Disposables and Nonwovens Association (EDANA) standardized method or (ii) know how to easily search for the EDANA method. See page 48, line 26. EDANA establishes and publishes a series of test methods for the various properties of nonwovens. These methods are used globally and often become standards adopted by the International Organization for Standardization (ISO). As a result of the case law cited, regardless of whether a person knows the standard or can easily acquire the standard, a person skilled in the art is deemed to know what a liquid strike-through test entails. In support of this assertion, please refer to the attached declaration submitted in accordance to 37 C.F.R. §1.132.

In light of the amendments and discussion presented above, Applicants respectfully request withdrawal of the § 112 rejections.

REJECTIONS UNDER 35 U.S.C. § 103(a)

Applicants respectfully submit that the Office has failed to make a *prima facie* case for the obviousness rejections presented below. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the reference teachings. *See In re Fritch*, 972 F.2d 1260 (Fed. Cir. 1992); MPEP § 2143.01. Second, there must be a reasonable expectation of success. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991); MPEP § 2143.02. Third, the prior art reference or combined references must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. Furthermore, in establishing a *prima facie* case of obviousness, case law clearly places the “burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103.” *In re Warner*, 379 F.2d 1011, 1016 (CCPA 1967).

Claims 1-2, 6-7, 12-17, and 12-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,645,569 in view of Bean et al. (5,837,041). In order to expedite prosecution of the present application, accompanying this Amendment is a terminal disclaimer filed in compliance with 37 C.F.R. 1.321(c). In light of the terminal disclaimer, Applicants’ respectfully request withdrawal of the rejection.

Claims 1, 3-7, and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,045,969 to Verchueren et al. (hereafter “Verchueren”). The Office states that the “amendment with its New Matter as written removes Verchueren . . . as a 102 reference, however if the intent of the claim was to make an absorbent article, not start out with one already, then the 103 would remain if so claimed.” Verchueren discloses a method for obtaining a lithographic base comprising the steps of plasma treating a hydrophobic support and coating the support with a non-gelatinous hydrophilic (co)polymer or (co)polymer mixture. *See Abstract*. However, Verchueren fails to teach or suggest all Applicants’ claim limitations. Claim 1, as amended, recites “a bodily exudate absorbing article comprises said material.” Verchueren does not disclose or suggest that its lithographic base is capable of absorbing bodily exudates.

Furthermore, Verchueren fails to be a valid reference for the obviousness rejection since it is not analogous prior art to Applicants’ claimed invention. Case law states, “In order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must

either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443 (Fed. Cir. 1992). Clearly, Verchueren, which is directed to the lithography and printing arts, is not in Applicants' field of absorbent articles capable of containing bodily exudates. Applicants assert that Verchueren is not reasonably pertinent to the particular problem with which the Applicants are concerned. Applicants are, in part, attempting to counteract the negative performance issues (e.g., lower ability to transport moisture through fabric) of certain hydrophobic components of material, such as synthetic polyester or nylon. *See* page 2 lines 8-17. Verchueren is not related to improved moisture transport. As a result, Verchueren is nonanalogous art and may not be relied upon for the obviousness rejection.

Claims 14-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 3,660,142 to Kasugai et al. (hereafter "Kasugai"). The Office states that "new claims 14-23 does not [sic] required [sic] the substrate to be an absorbent article, either initially or after treatment, and the 'strike through Test' remains lacking a clear and support explanation [sic] of what it means or its metes and bounds." *See* Paragraph 6 of the Office Action dated April 27, 2004. Kasugai is directed toward a method of making a photographic base material. *See* Abstract. Claims 14-23 have been cancelled; however, reference to the Strike-Through Test is now presented in Claims 24-26, which are dependent from Claim 1. As with Verchueren, Kasugai fails to teach or suggest all of Applicants' claim limitations and is nonanalogous art. Claim 1, as amended, recites "a bodily exudate absorbing article comprises said material." Kasugai does not disclose or suggest that its photographic base material is capable of absorbing bodily exudates.

Kasugai, which is directed to photographic arts, is not in Applicants' field of absorbent articles capable of containing bodily exudates. Furthermore, Kasugai is not reasonably pertinent to the particular problem with which the Applicants are concerned. Applicants are, in part, attempting to counteract the negative performance issues (e.g., lower ability to transport moisture through fabric) of certain hydrophobic components of material, such as synthetic polyester or nylon. *See* page 2 lines 8-17. Kasugai is not related to improved moisture transport. As a result, Kasugai is nonanalogous art and may not be relied upon for the obviousness rejection.

The Office further states that "claim 14, which are [sic] further modified by claim 15-16, provide for the treated material to have a vague and indefinite property." *See* Paragraph 7 of the Office Action dated April 27, 2004. The Office states that the quantity and property of the test liquid are unspecified. While Claims 14-16 have been cancelled, the Strike-Through Test appears in new claims 24-26. The new claims 24-26 now recite 5mL gushes rendering

the Office's rejection moot. As for the properties of the test liquid, Claims 24-26 recite "a test liquid according to a Strike Through Test." When read in light of the specification, the test liquid is identified as a "0.9% saline solution." See page 49, lines 2-3. In light of the specification, one of ordinary skill in the art could clearly recognize the metes and boundaries of the claims.

The Officer further states that "neither the procedure for the [Strike-Through] test nor its effect is clearly claimed." Applicants have previously addressed the clarity of the Strike-Through Test in responding to the §112, second paragraph. As a result of the §1.132 declaration and the discussion presented above, Applicants assert that the liquid strike-through test, liquid strike-through, and liquid strike-through time are clear as written. Furthermore, Claims 24-26, which include all the limitations of Claim 1, are also nonobvious in light of Kasugai.

#### **CONCLUSION**

Based on the foregoing reasons, Applicants respectfully submit that the Office has not made *prima facie* case of anticipation or obviousness and the rejections are therefore improper. Reconsideration and withdrawal of the rejections are respectfully requested. Allowance of each of the pending claims in the next Office Action is earnestly requested.

Respectfully Submitted,

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